

Object name

EPD Senica**Slovakia**

Object photo



Object description

The house is placed in a suburb of the town Skalica surrounded by small family houses. The entrance to the building is on the north side, where the garage is placed.

The object has a longitudinal shape. The living room is placed on the south-west side. On the north-east part is a bedroom, children rooms, bathroom and toilet. The building has no cellar. The basement is insulated with foam glass.

Walls are massive construction of lime sand bricks insulated with 300 mm cellulose. Roof is a wooden construction insulated with cellulose and covered with 15 cm soil as a green roof.

Heat losses are calculated by PHPP. For heating compact ventilation unit aerosmart m is used, which consists of a ventilation module with heat recovery, a mini heat pump for air and domestic water heating and a domestic water storage tank. A brine heat exchanger placed in the garden is used for frost protection. As additional heat sources infra-red panels are used.

Fact sheet

Single family house in Senica

Treated Floor Area	117 m ²
Number of apartments	1
Completion date	2009

Energy standard [PHPP]

Heat requirement / year	15 kWh/m ² a
Heat load	14 W/m ²
Primary energy requ.	81 kWh/m ² a
Air-tightness (n ₅₀ -value)	0,17 1/h
Building type	Masonry construction

U-value

Exterior wall	0,1 W/m ² K
Roof	0,07 W/m ² K
Basement floor / Floor slab	0,15 W/m ² K
Windows / average	W/m ² K

Specification ventilation system

Central System, Compact unit Drexel und Weiss: aerosmart M

Heating installation

Compact unit Drexel und Weiss:
aerosmart M

Construction costs --- Euro/m²

Building owner

private

Architect/Planner

Kierulfová, Kierulf, Createrra, s.r.o.

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